

Adenovirus

What is adenovirus infection?

Adenoviruses are a family of viruses. Infections from these viruses can cause illness in people and animals

What are the signs and symptoms of adenovirus infection?

Adenovirus often infects the airways – this can appear as a “cold” (e.g., sore throat, sneezing, runny nose, cough, headache, chills), croup, or bronchitis. Illness usually lasts three to five days, but serious infections can last weeks. Complications can include middle ear infections, pneumonia, or meningitis. Some types of adenovirus cause other illnesses, such as skin rash, conjunctivitis (pink-eye,) bladder infections, or bowel infections (e.g., diarrhea).

Who can get infected with adenovirus?

Anyone can be infected by adenovirus. Most infections are mild. Serious illness can occur in young children, the elderly, or those with weak immune systems. Outbreaks can occur where people are in close quarters.

How soon after exposure do symptoms appear?

For airway infections, symptoms may develop 2 to 14 days after exposure to the virus. For intestinal tract infections, symptoms may develop 3 to 10 days after exposure to the virus.

How is adenovirus spread?

Adenovirus spreads very easily and can survive for a long time on objects. The virus may be spread through contact with droplets from the nose and throat of an infected person (e.g., during coughing or sneezing). Infection can occur while eating or touching the eyes, nose, or mouth if hands are contaminated with virus and not washed well. Infected persons may spread the virus if they do not wash their hands well and then they handle food that other people eat. Drinking from contaminated water sources (e.g., poorly maintained swimming pools) may also lead to infection.

How long is a person able to spread adenovirus?

Sometimes adenoviruses infections last for a long time (e.g., months or years) without symptoms.

What is different about adenovirus serotype 14?

In 2007, the Centers for Disease Control and Prevention (CDC) published an article on several outbreaks of respiratory illness caused by a type of adenovirus (serotype 14) that can cause more severe disease. The report was mostly intended to remind medical providers that the virus can occasionally cause serious illness.

How is adenovirus infection diagnosed and treated?

Some laboratory tests for adenovirus are available; however, doctors usually diagnose infection from the person’s symptoms. There is no adenovirus-specific therapy – in most cases the immune system deals with the infection. Treatment may include rest, drinking plenty of fluids, over-the-counter medicine (e.g., acetaminophen [Tylenol]), a cool-mist humidifier, and sometimes bronchodilators. See a doctor if fever continues for more than a few days, symptoms worsen, breathing problems occur, or not enough fluids are being taken. Serious illness may need hospitalization (e.g., for fluids, oxygen) or other treatment (e.g., topical steroids for conjunctivitis) – those with weak immune systems may need treatment by specialists.

Does past infection with adenovirus make a person immune?

People who have been infected with a particular strain of adenovirus may be at least partly immune. However, there are many adenovirus types - people who have been infected may become infected with a different strain.

What can I do to prevent adenovirus infections?

There is no vaccine generally available to prevent adenovirus infection. Good health habits can help prevent adenovirus infection. These include covering your mouth and nose with a tissue when coughing or sneezing; washing your hands often to help protect yourself from germs (alcohol-based hand sanitizers may be used if hands are not visibly soiled); avoiding touching your eyes, nose or mouth; staying home from work, school, and errands when you are sick; and avoiding close contact with people who are sick.